# **TANNOY**

### **iQ SERIES**

#### PERFORMANCE DATA AND HARDWARE INFO

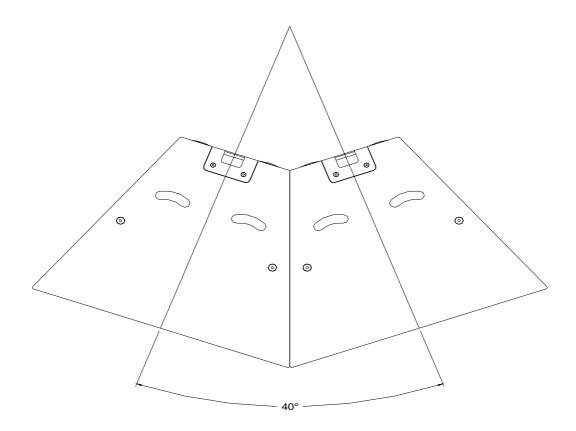
### iQ 10/15

NOTES:

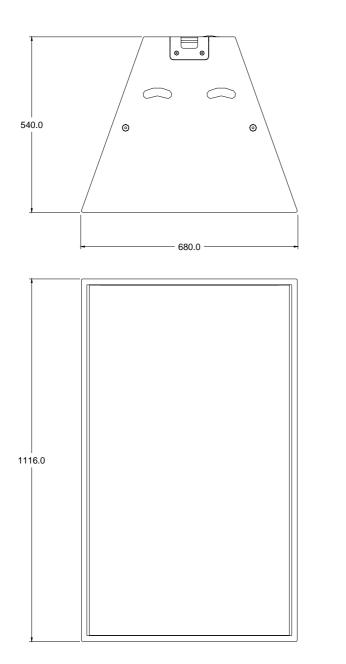
#### Arraying

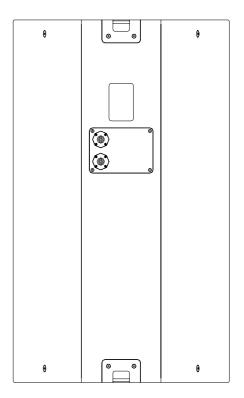
Comb filtering is a phenomenon, which cannot be cured by equalisation. Small alterations to loudspeaker positions can have the effect of minimising problematic combing frequencies. Arrays should be constructed so that the individual coverage patterns of each loudspeaker combine with minimal overlap. The design of the iQ 10/15 cabinet greatly simplifies the creation of effective arrays, allowing seamless wide (120 degree) horizontal coverage using two loudspeakers without the need for tedious experimentation.

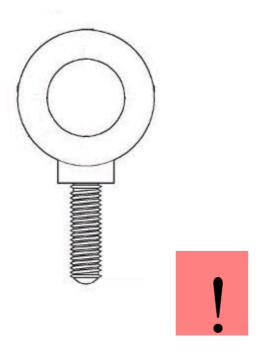
By placing the iQ 10/15 cabinets as shown in the diagram below, minimal dispersion pattern overlap is achieved, guaranteeing an extraordinarily smooth transition.



#### Dimensions







The Tannoy iQ 10/15 loudspeaker can be flown with high quality VEB M10 eyebolts with collar to BS4278:1984. The loudspeakers are equipped with internal steel braces, which also double as the flying points, and accept VEB M10 eyebolts.

To install the VEB M10 eyebolts remove the original M10 counter sunk screws from the locations you wish to install the VEB M10 eyebolts. Then replace these counter sunk M10 screws with the VEB M10 eyebolts. The kelping brackets on the rear of the cabinet should **only** be used for tilting the loudspeaker to the desired angle.

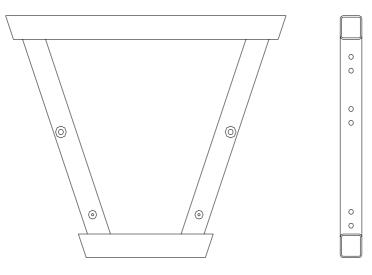
Important: It is imperative for safety reasons that two eyebolts linked to two independently fixed straps are used per cabinet. Never attempt to use formed eyebolts i.e. formed from a steel rod and bent into an eye.

#### SINGLE iQ SUSPENSION TRUSS (By ATM<sup>™</sup>)

The iQ suspension truss is an economical solution to suspending a single purpose loudspeaker array from two or three fixed structural attachment points. The iQ Suspension Truss is designed to hold the loudspeakers at the optimum splay angle to optimize cluster performance. Most Suspension Trusses are equipped with two suspension rails with multiple attachment holes that travel from front to back across the top of the array, allowing manipulation of the center of gravity of the cluster to achieve down tilt without a pull strap.

Features:

- Optimized fixed splay angle
- Adjustable tilt
- Fast multiple enclosure rigging system
- Economical
- Low profile, clean looking array

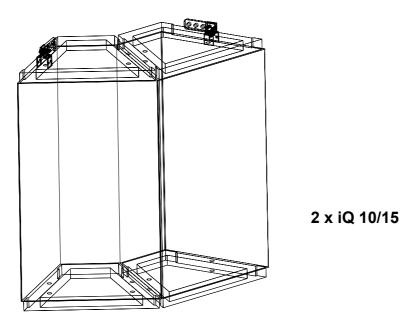


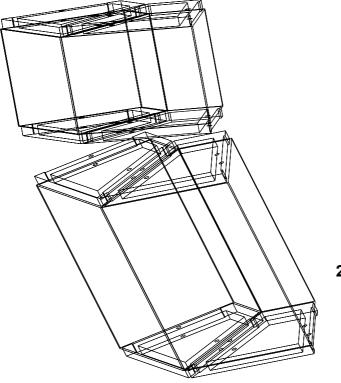
iQ Suspension Truss

The iQ Suspension Truss is a "semi-custom" product line that is built to order. Please contact your Tannoy or ATM Fly-Ware dealer with the loudspeaker model numbers along with the array application.

Full assembly instructions for the iQ Suspension Truss accompany the product.

Typical Suspension Truss applications –

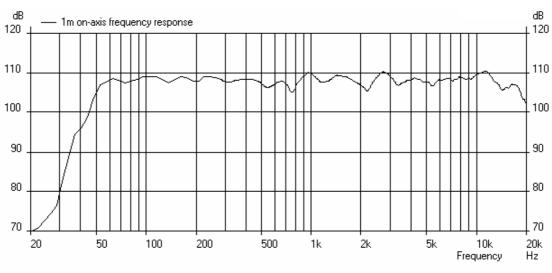


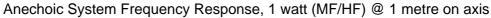


2 x iQ 10C & 2 x iQ 10/15

#### **Performance Data**

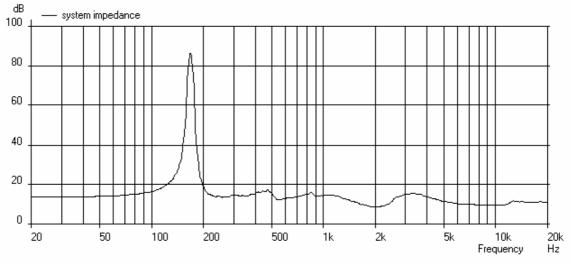
#### FREQUENCY RESPONSE





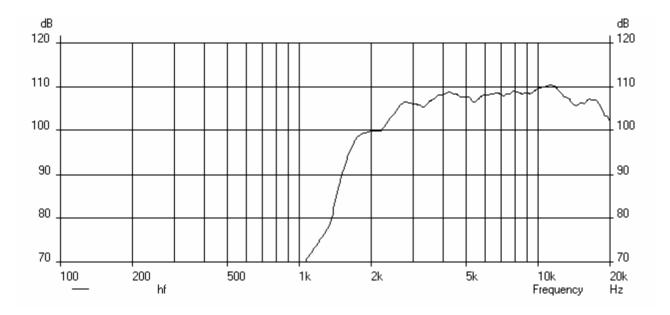


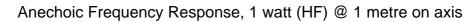
#### INPUT IMPEDANCE

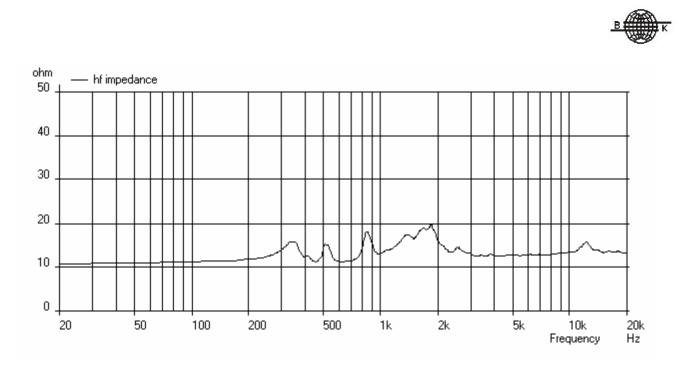


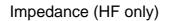
Impedance (Passive MF/HF only)



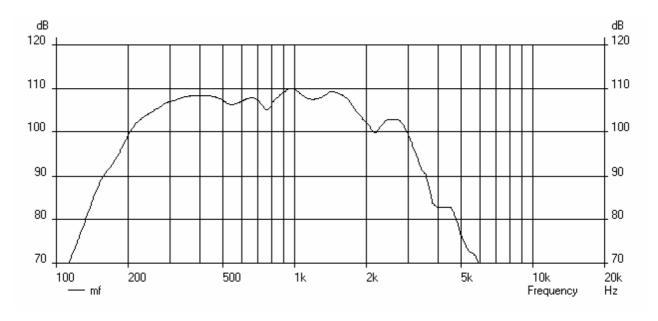




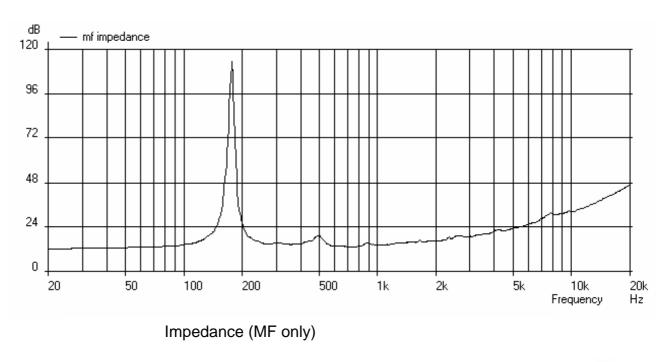








Anechoic Frequency Response, 1 watt (MF) @ 1 metre on axis





A comprehensive range of measurements including off axis frequency response curves, or octave polar diagrams (single & two cabinet arrays) and beamwidth plots as well as Ease™ data can be downloaded from http://www.tannoy.com/



#### **Technical Specifications**

Frequency Response (1) +/- 3dB

-10dB Point

Nominal Dispersion

**Driver Compliment** 

Configurations

#### Components

Frequency Band (3) Sensitivity (1) Power Handling (2)

Impedance

Crossover

Enclosure Finish

**Protective Grille** 

Connectors

Maximum SPL (3)

DI Averaged (PCQ)

DI Averaged (PCQ)	@ 1kHz (ISO) @ 2kHz (ISO) @ 4kHz (ISO) @ 8kHz (ISO) @ 16kHz (ISO)
Q Averaged (PCQ)	

@ 1kHz (ISO) @ 2kHz (ISO)
@ 2kHz (ISO)
@ 4kHz (ISO)
@ 8kHz (ISO)
@ 16kHz (ISO) 49Hz - 19kHz

43Hz

 $60^{\circ} \times 40^{\circ}$  (H x V)

MF/HF - 1 x 250mm (10") PowerDual™ 1 x 380mm (15") LF -

Bi-amp (standard) - LF & Passive MF/HF Tri-amp (optional)

LF	Midrange	High Frequency	
43Hz – 180Hz 101dB 400W (average) 800W (programme) 1600W (Peak) 8Ω	180Hz – 2.77kHz 107dB 175W (average) 350W (programme) 700W (peak) 16Ω	2.77kHz – 19kHz 110dB 50W (average) 100W (programme) 200W (peak) 16Ω	
127dB (average) 133 (peak)	129dB (average) 135dB (peak)	127dB (average) 133dB (peak)	
11.0, 500 Hz - 16 kHz 12.6 12.2 9.5 11.5 12.3 13.5, 500 Hz - 16 kHz 18.3 16.7 8.8 14			
16.9			
Active 180Hz, Passive 2.6kHz (standard model) 4th order high pass, 4th order low pass			
18mm multi-ply birch plywood			
Textured black paint (	optional in white)		
E			

Foam covered, powder coated perforated steel

2 x Speakon NL4MP in/out (standard model) 4 x Speakon NL4MP (optional tri-amp model)

Fittings	8 x M10 inserts & 2 pullback points 4 x Recessed Carrying handles	
Dimensions	1116mm x 680mm x 540mm (43 15/16" x 26 ¾" x 21 ¼")	
Weight	69kg (152.1 lbs)	

NOTES:

(1) Average over stated bandwidth. Measured at 1m on axis. (2) Long term power handling capacity as defined in EIA standard RS - 426A. (3) Unweighted pink noise input, measured at 1m in an anechoic chamber

The iQ 10/15 is designed for use with the Tannoy TDX1 & TDX2 digital system controller, which provide a preset configuration of Crossover frequencies, relative output levels, and system equalization for optimum performance. Should you intend using an alternative Loudspeaker management system, these parameters can be accessed from the Tannoy website - www.tannoy.com - or can be found in this IQ 10/15 user manual.

Tannoy operates a policy of continuous research and development. The introduction of new materials or manufacturing methods will always equal or exceed the publish which Tannoy reserves the right to alter without prior notice. Please verify the latest specifications when dealing with critical applications.

Unique Funktion One Axhead Technology (UK patent number GB2270606) is incorporated into Tannoy iQ Series SuperDual<sup>™</sup> products by agreement with Funkton One Research

#### iQ 10/15 Service Parts and Accessories

Part Number	Description
7900 0607	Driver Kit Type 2519 (MF)
7900 0609	Recone Kit Type 2519 (MF)
7900 0608	Driver Kit Type 0278 (HF)
7900 0610	Diaphragm Type 0278 (HF)
8001 2820	VEB – Secur ET – Eyebolts M10
8000 3630	TDX1 Digital System Controller 60-250V – UK
8000 3631	TDX1 Digital System Controller 60-250V – EUR
8000 3632	TDX1 Digital System Controller 60-250V – USA
8000 0727	TDX2 Digital loudspeaker management system 60-250V - UK
8000 0728	TDX2 Digital loudspeaker management system 60-250V - EUR
8000 0729	TDX2 Digital loudspeaker management system 60-250V – USA

#### Warranty

No maintenance of the iQ 10/15 loudspeaker is necessary.

All Tannoy professional loudspeaker products are covered by a 5 year warranty from the date of manufacture subject to the absence of misuse, overload or accidental damage. Claims will not be considered is the serial number has been altered or removed. A Tannoy Professional dealer or service agent should only carry out work under warranty. This warranty in no way affects your statutory rights. For further information, please contact your dealer or distributor in your country. If you cannot locate your distributor, please contact Customer Services, Tannoy Ltd at the address given below.

Customer Services Tannoy Ltd. Coatbridge ML5 4TF Scotland

Telephone:	01236 420199	(National)
	+44 1236 420199	(International)
Fax:	01236 428230	(National)
	+44 1236 428230	(International)
E-Mail:	service@tannoy.com	
Website:	www.tannoy.com	

DO NOT SHIP ANY PRODUCT TO TANNOY WITHOUT PREVIOUS AUTHORISATION

Our policy commits us to incorporating improvements to our products through continuous research and development. Please confirm current specifications for critical applications with your supplier.

## CE

The following apparatus is/are manufactured in the United Kingdom by Tannoy Ltd of Rosehall Industrial estate, Coatbridge, Scotland, ML5 4TF and conform(s) to the protection requirements of the European Electromagnetic Compatibility Standards and Directives relevant to Domestic Electrical Equipment. The apparatus is designed and constructed such that electromagnetic disturbances generated do not exceed levels allowing radio and telecommunications equipment and other apparatus to operate as intended, and, the apparatus has an adequate level of intrinsic immunity to electromagnetic disturbance to enable operation as specified and intended. This Equipment conforms to the requirements of the EMC Directive 89/336/EEC, amended by 92/31/EEC and 93/68/EEC and the requirements of the low voltage directive 73/23/EEC, amended by 93/68/EEC.

Details of the Apparatus:

Associated Technical File: Applicable Standards:

**Electrical Safety:** 

Signed:

Tannoy Contractor Loudspeaker Model Number: iQ10/15 EMCIQ10/15 EN 55103 –1:1996 Emission EN 55103 –2:1996 Immunity EN 60065:1993

Engineering Director – Professional Products Tannoy Professional

11/10/2004

Position:

Date:

For Tannoy Ltd